

shield with a pair of posterior marginal pores; shields surrounded by striated skin. Anus terminal. Legs stout, with short setae as figured; tarsi with claws, without pulvilli; tarsus I (Fig. 4) with seven rodlike sensory setae and one short conelike spine; tibia I with three rodlike sensory setae; tarsus II (Fig. 5) with two rodlike sensory setae. Coxae arranged in four groups of two each (Fig. 6), separated by striated skin; coxal plates merging as figured to form a more or less ventral armor; coxa I with a short dorsal rodlike seta. Genitalia (Fig. 7) with three pairs of genital suckers; with five pairs of short setae; venter of mite surrounding genital opening striated,

with four pairs of setae. Length including rostrum 340 μ ; width 100 μ .

Types.—Type female, U.S.N.M. no. 1858, and five paratypes, all deposited in the U. S. National Museum.

Type habitat.—In peach orchard soil, Upson County, Ga., collected by W. F. Turner, July 3 and 4, 1936.

This mite is named for Charles Pomerantz, of New York City, in recognition of his enthusiastic services to the study of the rickettsial pox disease, which is carried to man by *Allodermanyssus sanguineus* (Hirst), a mite parasite of mice.

ZOOLOGY.—*Some littoral sea-urchins from the Philippines*.¹ AUSTIN H. CLARK,
U. S. National Museum.

The American Museum of Natural History, New York, through John C. Armstrong, has recently sent me for examination a collection of littoral sea-urchins made by Dr. Willard G. Van Name and associates in the Gulf of Dávao, southeastern Mindanao, in 1936 and 1937. I much appreciate the courtesy of the American Museum and of Mr. Armstrong in permitting me to study this interesting collection.

Many species of sea-urchins have been recorded from the littoral of the Philippines, but in very few cases are the records accompanied by definite localities or other data.

In 1928 Dr. Hilario A. Roxas published a list of the littoral species contained in the collection of the Department of Zoology, University of the Philippines. His list included 17 species, but two of these, *Echinometra picta* and *E. oblonga*, are synonyms of *E. mathaci*, the commonest species in the islands. His *Prionocidaris baculosa* is, as has been shown by Mortensen, *Eucidaris metularia*, and his *Toxopneustes chlorocanthus* is *T. pilcolus*.

The present list includes only 13 species, but 5 of these are not given in Dr. Roxas's list. These are: *Phyllacanthus imperialis*, *Echinothrix diadema*, *Echinostrephus aciculatus*, *Echinodiscus tenuissimus*, and *Echinoneus cyclostomus*.

¹ Published by permission of the Secretary of the Smithsonian Institution. Received March 15, 1949.

Most of Dr. Roxas's specimens came from Puerto Galera, Mindoro. He does not mention any from Mindanao.

CIDARIDAE

Phyllacanthus imperialis (Lamarck)

Locality.—Padada Beach; G. R. Oesch (1 specimen).

Notes.—This is a small specimen 15 mm in diameter with the longest spines 22 mm long. The spines are stoutest in their outer two-thirds. They have two narrow white bands separated by about their own width near the tip. The color is purple.

Plococidaris verticillata (Lamarck)

Localities.—Padada Beach; G. R. Oesch, June 28 to July 8, 1936 (2 specimens and 1 very small broken specimen).

Reef about 1 kilometer north of Digos, Gulf of Dávao; E. H. Oesch and Dr. W. G. Van Name, November 1937 (1 specimen).

Eucidaris metularia (Lamarck)

Locality.—Padada Beach; G. R. Oesch, July 6 to 19, 1936 (2 specimens).

Padada Beach; G. R. Oesch, March 8, 1936 (1 specimen).

DIADEMATIDAE

Diadema setosum (Leske)

Locality.—Padada Beach; G. R. Oesch (1 specimen).

Notes.—The test is 15 mm in diameter and

the spines are about 38 mm long. The color is dull red, the spines banded with white. The pedicellariae are typical of this species.

Echinothrix diadema (Linné)

Locality.—Reef off Digos, Gulf of Dávao; Ernest H. and G. R. Oesch and Dr. W. G. Van Name, November 1937 (1 specimen).

Echinothrix calamaris (Pallas)

Locality.—Reef about 1 kilometer north of Digos, Gulf of Dávao; E. H. Oesch and Dr. W. G. Van Name, November 1937 (1 specimen).

TEMNOPLEURIDAE

Mespilia globulus (Linné)

Locality.—Padada Beach; G. R. Oesch, May 2, 3, July 6 to 19, 1936 (3 specimens).

ECHINOMETRIDAE

Echinostrephus aciculatus A. Agassiz

Locality.—Reef off Digos, Gulf of Dávao; Ernest H. and G. R. Oesch and Dr. W. G. Van Name, November 1937 (1 specimen).

Echinometra mathaei (de Blainville)

Localities.—Padada Beach; G. R. Oesch, March 8, 14, 16, 19, April 5, 12, May 9, 10, June 5, 6, 20, 21, 25, 26, 28, July 6 to 19, 1936 (91 specimens).

Reef off Digos, Gulf of Dávao; Ernest H. and G. R. Oesch and Dr. W. G. Van Name, November 1937 (4 specimens).

Flats about 1½ miles south of the mouth of the Padada River, Gulf of Dávao; E. H. Oesch and Dr. W. G. Van Name, November 1937 (6 specimens).

Note.—All the specimens from Padada Beach are small.

Heterocentrotus mammillatus (Linné)

Localities.—Padada Beach: G. R. Oesch, June 28 to July 19, 1936 (2 specimens).

One kilometer north of Santa Cruz, Gulf of Dávao; Dr. W. G. Van Name and Felix Barto, November 1937 (4 specimens).

Flats about 1½ miles south of the mouth of the Padada River, near Mangrove Island; E. H. Oesch and Dr. W. G. Van Name, November 1937 (1 specimen).

Reef off Digos, Gulf of Dávao; Ernest H. and G. R. Oesch and Dr. W. G. Van Name, November 1937 (1 specimen).

Notes.—In the specimens from Padada Beach the general color was deep red with lighter bands on the spines, and the secondary spines on the abactinal surface whitish.

A large specimen from north of Santa Cruz was very deep red with lighter red bands on the longer spines; the short secondary spines were not very light colored. A smaller specimen from the same locality was browner and in general lighter colored; the short secondary spines were almost white.

LAGANIDAE

Laganum laganum (Leske)

Localities.—Padada Beach; G. R. Oesch, April 5, 12, May 2, 3, 1936 (52 specimens).

Two kilometers north of Digos, Santa Cruz, Gulf of Dávao; E. H. and G. R. Oesch and Dr. W. G. Van Name, November 1937 (24 specimens).

SCUTELLIDAE

Echinodiscus tenuissimus (L. Agassiz and Desor)

Locality.—Two kilometers north of Digos, Santa Cruz, Gulf of Dávao; E. H. and G. R. Oesch and Dr. W. G. Van Name, November 1937 (1 specimen).

ECHINONEIDAE

Echinoneus cyclostomus (Leske)

Locality.—Not given.

Notes.—This is a large specimen 30 mm. long, 26 mm broad, and 16 mm high.

REFERENCE

- ROXAS, HILARIO A. *Philippine littoral Echinoida*. *Philippine Journ. Sci.* **36** (2): 243-270, pls. 1-7 June 1928.